

(12) INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

(19) World Intellectual Property
Organization
International Bureau



(43) International Publication Date
13 January 2005 (13.01.2005)

PCT

(10) International Publication Number
WO 2005/003199 A1

(51) International Patent Classification⁷: **C08F 230/08**,
C08L 43/04, C08K 5/54, C08L 83/04

Marvin, Jr. [US/US]; 856 Mohill Place, Piscataway, NJ
08854 (US).

(21) International Application Number:
PCT/US2004/019910

(74) Agent: **HANSBRO, Kevin, R.**; The Dow Chemical Com-
pany, Intellectual Property, P.O. Box 1967, Midland, MI
48641-1967 (US).

(22) International Filing Date: 22 June 2004 (22.06.2004)

(25) Filing Language: English

(26) Publication Language: English

(30) Priority Data:
60/483,269 25 June 2003 (25.06.2003) US

(81) Designated States (*unless otherwise indicated, for every
kind of national protection available*): AE, AG, AL, AM,
AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN,
CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI,
GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE,
KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD,
MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG,
PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM,
TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM,
ZW.

(71) Applicant (*for all designated States except US*): **UNION
CARBIDE CHEMICALS & PLASTICS TECHNOL-
OGY CORPORATION** [US/US]; 39 Old Ridgebury
Road, Danbury, CT 06817-0001 (US).

(84) Designated States (*unless otherwise indicated, for every
kind of regional protection available*): ARIPO (BW, GH,
GM, KE, LS, MW, MZ, NA, SD, SL, SZ, TZ, UG, ZM,
ZW), Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM),
European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI,
FR, GB, GR, HU, IE, IT, LU, MC, NL, PL, PT, RO, SE, SI,
SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ,
GW, ML, MR, NE, SN, TD, TG).

(72) Inventors; and

(75) Inventors/Applicants (*for US only*): **BISCOGLIO,**
Michael, B. [US/US]; 164 Nebula Road, Piscataway,
NJ 08854 (US). **DEVLIN, Kenneth, T.** [US/US]; 207
Chatsworth Drive, Somerset, NJ 08873 (US). **ESSEGHIR,**
Mohamed [US/US]; 5 Robin Lane, Monroe Township,
NJ 08831 (US). **GROSS, Laurence, H.** [US/US]; 977
Rector Road, Bridgewater, NJ 08807 (US). **MCDANIEL,**
Donald, L., Jr. [US/US]; 931 Boesel Avenue, Manville,
NJ 08835 (US). **SHUROTT, Salvatore, F.** [US/US]; 189
Stillhouse Road, Freehold, NJ 07728 (US). **COATES,**

Published:

— with international search report

*For two-letter codes and other abbreviations, refer to the "Guid-
ance Notes on Codes and Abbreviations" appearing at the begin-
ning of each regular issue of the PCT Gazette.*

(54) Title: MOISTURE CROSSLINKABLE POLYMERIC COMPOSITION CONTAINING SPECIAL ANTIOXIDANTS

(57) Abstract: The present invention is a moisture-crosslinkable polymeric composition comprising (a) a silane-functionalized olefinic polymer, (b) an acidic silanol condensation catalyst, and (c) an antioxidant, not having a tertiary alkyl-substituted aryl or phenolic group, wherein the polymeric composition does not generate a high amount of foul-smelling or combustible gases. Alternatively, the antioxidant is substantially free of substituents vulnerable to dealkylation in the presence of the acidic silanol condensation catalyst and at conventional processing conditions. The invention also includes methods for preparing the moisture-crosslinkable polymeric composition. The moisture-crosslinkable polymeric compositions can be used as a coating and applied over a wire or a cable.

WO 2005/003199 A1